

BEAM POWER AMPLIFIER

DESCRIPTION

The GL-6005 is a miniature beam-power amplifier intended for use in medium-power audio-frequency applications. The tube is specially designed to assure dependable life and reliable service under the exacting conditions encountered in mobile and

aircraft applications. Features include mechanical ruggedization and a heater-cathode construction designed to withstand many-thousand cycles of intermittent operation.

TECHNICAL INFORMATION

GENERAL

Electrical Data

Cathode.....	Coated Unipotential
Heater Voltage (A-c or D-c).....	6.3 Volts
Heater Current.....	0.45 Ampere

Mechanical Data

Peak Impact Acceleration in Any Direction.....	600G
Vibrational Acceleration in Any Direction.....	2.5G
Bulb Temperature at Any Point.....	250C
Envelope.....	T-5½ Glass
Base.....	E7-1, Miniature Button 7-pin
Mounting Position.....	Any


Electronic
TUBE

GENERAL  ELECTRIC

TECHNICAL INFORMATION (CONT'D)

MAXIMUM RATINGS

ELECTRICAL (DESIGN CENTER VALUES)

Plate Voltage.....	250 Volts
Screen Voltage.....	250 Volts
Plate Dissipation.....	12 Watts
Screen Dissipation.....	2 Watts
Heater-Cathode Voltage.....	90 Volts
Grid Number 1 Circuit Resistance	
With Fixed Bias.....	0.1 Megohm
With Cathode Bias.....	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

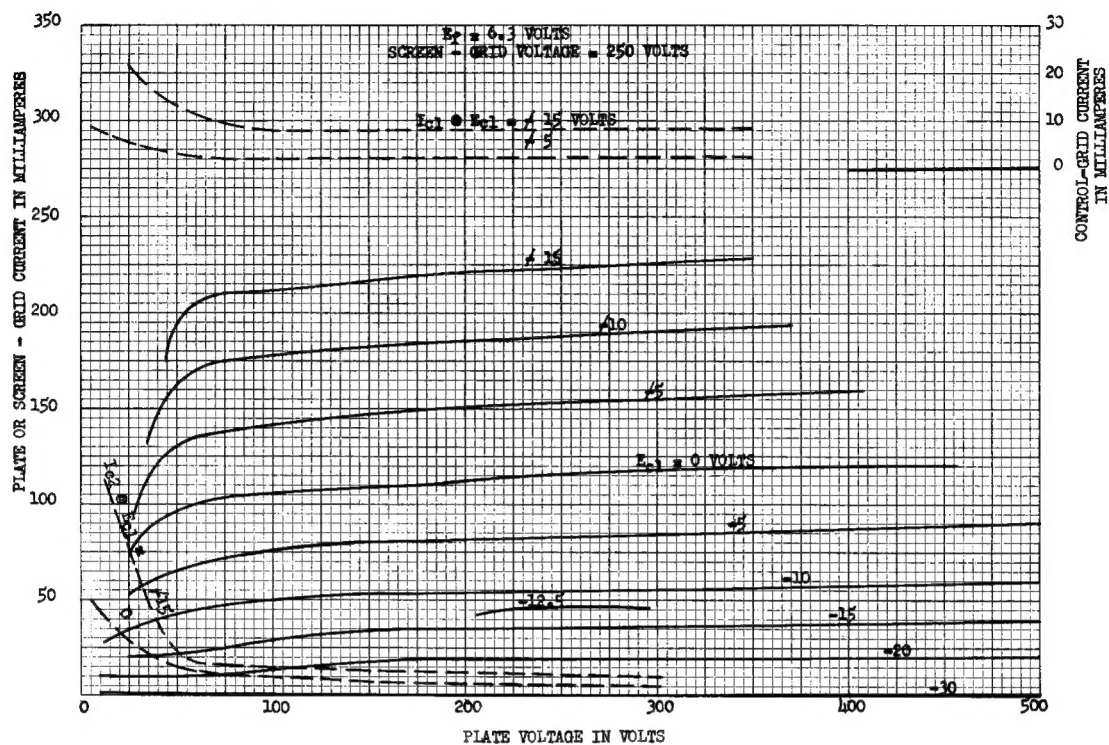
CLASS A₁ AMPLIFIER

Plate Voltage.....	180	250 Volts
Screen Voltage.....	180	250 Volts
Grid Number 1 Voltage.....	-8.5	-12.5 Volts
Peak A-F Grid Number 1 Voltage.....	8.5	12.5 Volts
Plate Resistance (Approx).....	58000	52000 Ohms
Transconductance.....	3700	4100 Micromhos
Zero-Signal Plate Current.....	29	45 Milliamperes
Maximum-Signal Plate Current.....	30	47 Milliamperes
Zero-Signal Screen Current.....	3	4.5 Milliamperes
Maximum-Signal Screen Current.....	4	7 Milliamperes
Load Resistance.....	5500	5000 Ohms
Total Harmonic Distortion (Approx.).....	8	8 Per Cent
Power Output.....	2.0	4.5 Watts

PUSH-PULL CLASS AB₁ AMPLIFIER (VALUES FOR TWO TUBES)

Plate Voltage.....	250 Volts
Screen Voltage.....	250 Volts
Grid Number 1 Voltage.....	-15 Volts
Peak A-F Grid-to-Grid Voltage.....	30 Volts
Plate Resistance (Each Tube).....	60000 Ohms
Transconductance (Each Tube).....	3750 Micromhos
Zero-Signal Plate Current.....	70 Milliamperes
Maximum-Signal Plate Current.....	79 Milliamperes
Zero-Signal Screen Current.....	5 Milliamperes
Maximum-Signal Screen Current.....	13 Milliamperes
Effective Load Resistance (Plate to Plate).....	10000 Ohms
Total Harmonic Distortion.....	5 Per Cent
Maximum-Signal Power Output.....	10 Watts

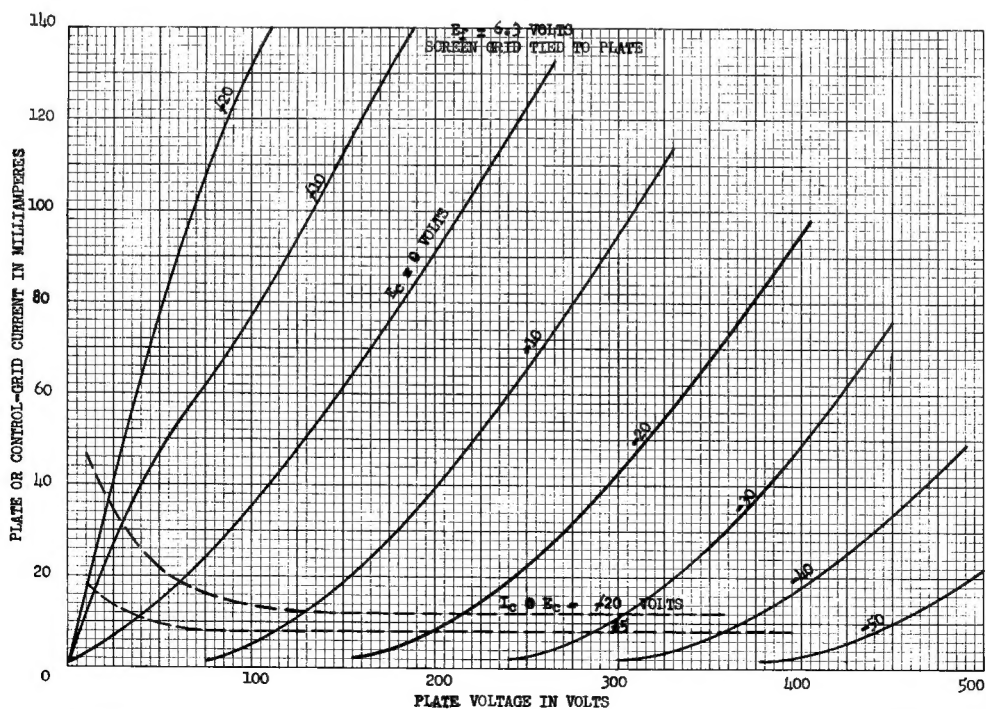
AVERAGE PLATE CHARACTERISTICS PENTODE CONNECTION



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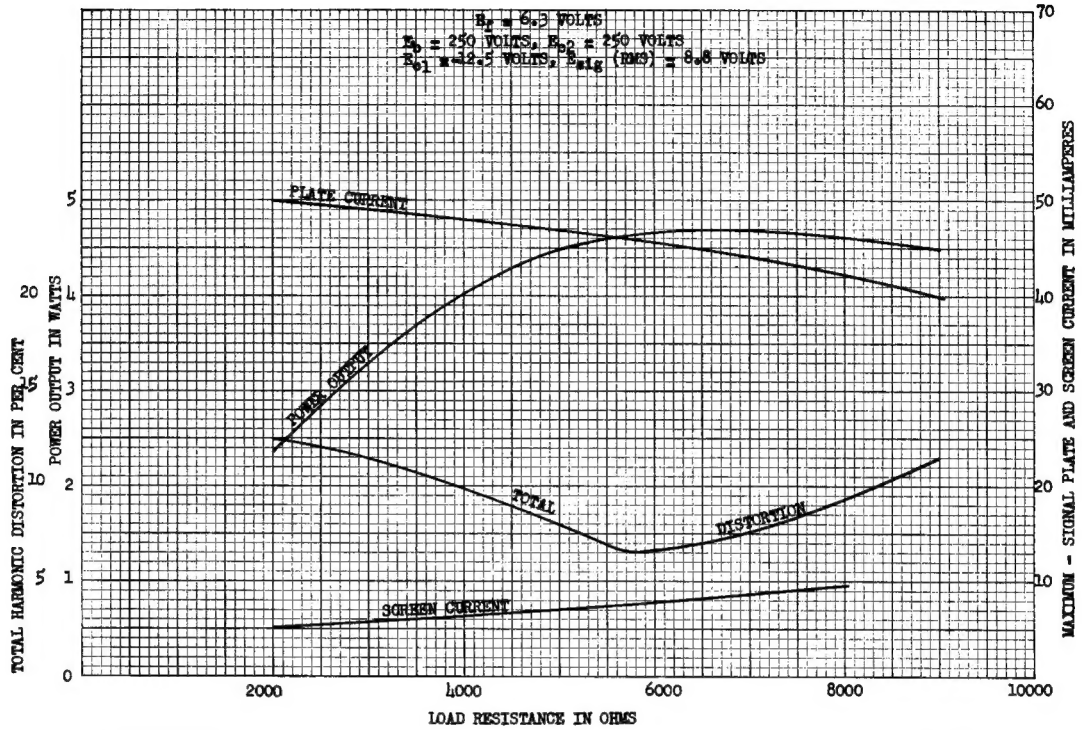
AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION



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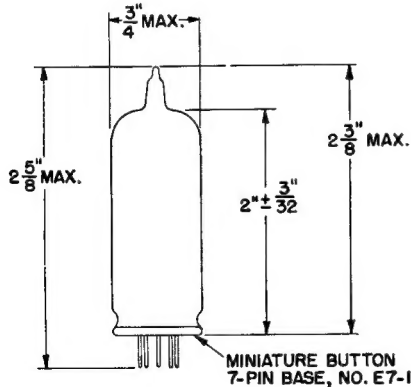
OPERATION CHARACTERISTICS PENTODE CONNECTION



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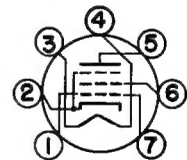
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OUTLINE



N-15192AZ

BASING DIAGRAM



7BZ

- PIN 1 - GRID #1
- PIN 2 - CATHODE AND GRID #3
- PIN 3 - HEATER
- PIN 4 - HEATER
- PIN 5 - PLATE
- PIN 6 - GRID #2 (SCREEN)
- PIN 7 - GRID #1

3-30-51

Tube Department

GENERAL ELECTRIC

Schenectady, N. Y.